Globalstar™

XCOM RAN: Realize the Full Potential of Private 5G Networking

Access higher capacity and bandwidth with lower latency and no handoff or interference with XCOM RAN.

Private 5G networks are transforming industries by delivering secure, high-performance, and low-latency connectivity tailored for enterprise, industrial, and mission-critical applications. Unlike public networks, private 5G offers dedicated bandwidth, enhanced security, and greater control, ensuring uninterrupted operations, improved efficiency, and real-time data processing.

But traditional private networks – wireless or cellular – have certain limitations. XCOM RAN can help.

XCOM RAN is a 5G private networking solution that eliminates traditional private network challenges and boosts the benefits.

Typical private networking hurdles include handoff challenges, interruptions in connectivity that detract from reliability, and interference. XCOM RAN enables the network to act as a single super cell.

- **Single** – Users stay connected without gaps, handovers, or interference

- **Super** – Users enjoy the aggregate performance of all radios
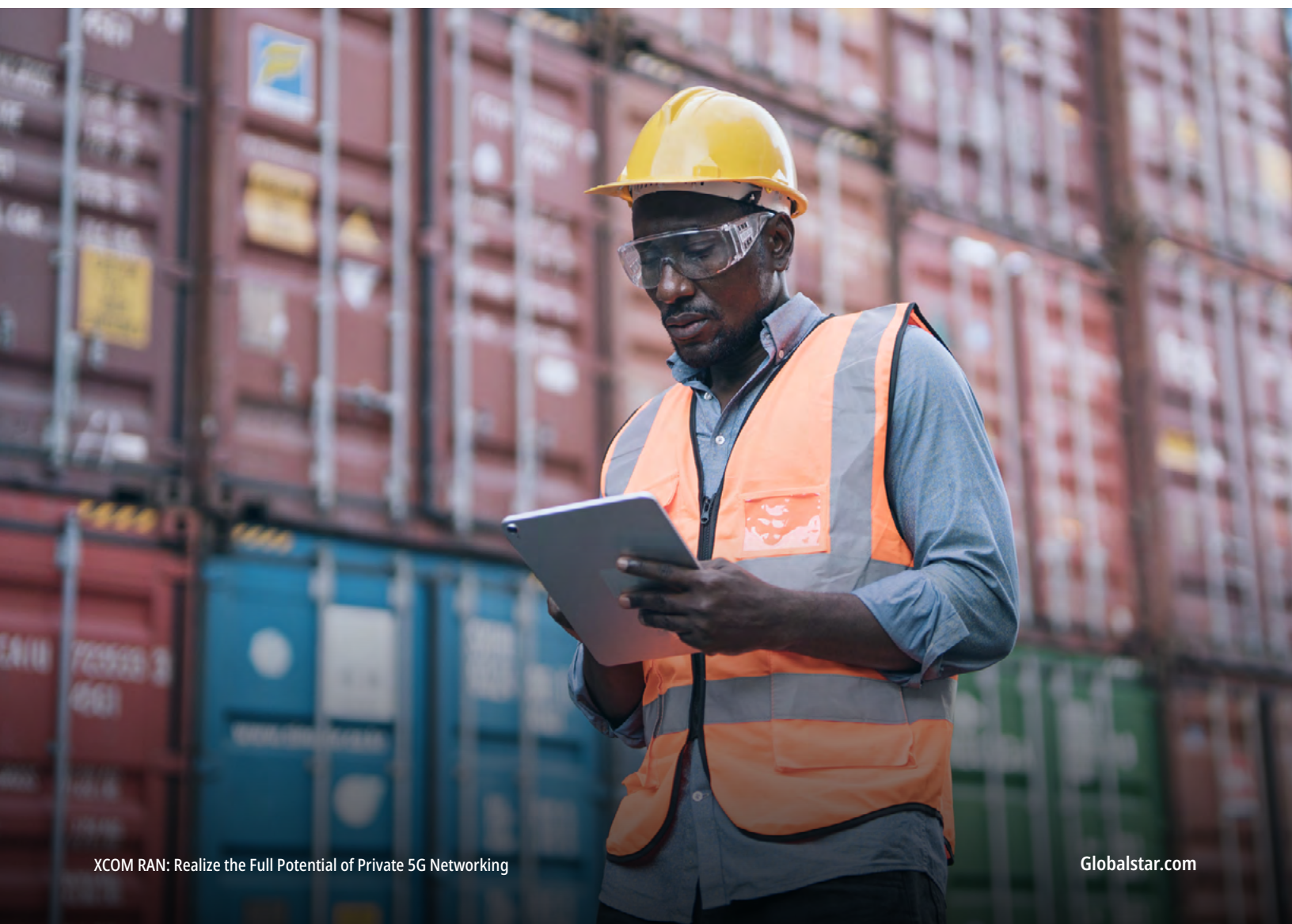
XCOM RAN

XCOM RAN is a powerful solution that delivers peak results with optimized connectivity in mid-band spectrum, including CBRS (n48), n53, and n78.

XCOM RAN Benefits

- 3GPP based private 5G wireless network deployments

- Distributed, massive MIMO with a cluster of RRUs

- XCOM RAN technology supports 32 antennas and 16 simultaneous data streams over 10 MHz, 40 MHZ, and 100 MHZ

- XCOM RAN is a software-defined radio system with RU hardware and accelerators for compute intensive operations (FEC, security, etc.)

- Peak spectral efficiency around 80 bps/Hz

- CBRS (n48) band (with SAS compliance), C-band (n78), and band n53 support

- XCOM RAN is available with a pre-integrated 5G core (xCore) and has been successfully integrated with other leading 5G cores, such as Druid, Ataya and Azure

- Supports QoS allocation

Band n53 Benefits

To truly optimize the power of 5G, XCOM RAN paired with Band n53 delivers key benefits:

- Time-Division Duplex (TDD) for spectrum efficiency

- 2483.5-2495 frequency range

- 3GPP-compliant

- Supported by major chipset OEMs

- No interference with unlicensed or shared spectrum and mobile bands

- Better range and coverage than Wi-Fi

- Stable performance

- Military-grade security

- 5G network slicing

XCOM RAN Radio Unit Specifications

NR Mode
- NR: TDD

Frequency Band
- n48 (3,550-3,700 MHz)
- n53 (2,483.5-2,495 MHz)
- n78 (3,300-3,800 MHz)

Channel Bandwidth
- NR : 10MHz, 40MHz, 100MHz

Multiplexing
- MU-MIMO

Maximum Conducted RF Power
- 1W/30dBm

Modulation(s)
- QPSK, 16QAM, 64QAM, 256QAM

Data Interface
- Optical fiber (SFP+), Cat 6A (RJ45)

Power Supply
- Primary Power: PoE++ Type 4 Class 8
- Secondary Power: -48VDC when PoE is not available

Power Consumption
- Maximum 60W

Operating Temperature
- -10C to +50C

LED Indicators
- 3x programmable status LEDs

Weight
- 8.9lbs/4kg

Dimensions (HxWxD)
- 9.5x9.5x9.5 inches
- 214x241x88 mm

Installation
- Ceiling, wall, or pole mount

Cooling Method
- Natural convection cooling

FCC Classification
- Category A Citizen Broadband Radio Service Device (CBSD) for Band n48

Fronthaul
- O-RAN 7.2x

Why Globalstar?

Globalstar helps people connect, communicate, and transmit data in smarter ways.

Globalstar empowers its customers to connect, transmit, and communicate in smarter ways – easily, quickly, securely, and affordably – offering reliable satellite and terrestrial connectivity services as an international telecom infrastructure provider. The Company's low Earth orbit ("LEO") satellite constellation ensures secure data transmission for connecting and protecting assets, transmitting critical operational data, and saving lives for consumers, businesses, and government agencies across the globe. Globalstar's terrestrial spectrum, Band 53, and its 5G variant, n53, offer carriers, cable companies, and system integrators a versatile, fully licensed channel for private networks with a growing ecosystem

to improve customer wireless connectivity, while Globalstar's XCOM Radio Access Network ("RAN") product offers significant capacity gains in dense wireless deployments. In addition to SPOT GPS messengers, Globalstar offers next-generation internet of things ("IoT") hardware and software products for efficiently tracking and monitoring assets, processing smart data at the edge, and managing analytics with cloud-based telematics solutions to drive safety, productivity, and profitability.

We transform smart ideas into smarter solutions.

To learn more about how Globalstar can benefit your business, contact us at salesinfo@globalstar.com.